

Office Action Summary

Application No.

10/747,945

Applicant(s)

PARK, SE WOONG

Examiner

DANIEL M. PASIEWICZ

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 20-29 is/are pending in the application.
- 4a) Of the above claim(s) 26-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 20-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
- Paper No(s)/Mail Date _____
- 4) ☒ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 3/10/2008 with respect to the 112 rejections of claims 6 and 10 have been fully considered but they are not persuasive.
2. Applicant's arguments, see 11-13, filed 3/10/2008, with respect to the rejection(s) of claim(s) 1-12 and 20-25 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection has been made below.
3. With respect to **claims 6 and 10** Applicant argues "one of ordinary skill in the art would recognize and understand that the term "about" means "approximately", and thus, would understand the parameter intended."
4. As stated in MPEP 2173.05(b):

In determining the range encompassed by the term "about", one must consider the context of the term as it is used in the specification and claims of the application. Ortho-McNeil Pharm., Inc. v. Caraco Pharm. Labs., Ltd., 476 F.3d 1321, 1326, 81 USPQ2d 1427, 1432 (Fed. Cir. 2007). In < W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), the court held that a limitation defining the stretch rate of a plastic as "exceeding about 10% per second" is definite because infringement could clearly be assessed through the use of a stopwatch. However, the court held that claims reciting "at least about" were invalid for indefiniteness where there was close prior art and there was nothing in the specification, prosecution history, or the

prior art to provide any indication as to what range of specific activity is covered by the term "about." Amgen, Inc. v. Chugai Pharmaceutical Co., 927 F.2d 1200, 18 USPQ2d 1016 (Fed. Cir. 1991).

And

The phrases "relatively shallow," "of the order of," "the order of about 5mm," and "substantial portion" were held to be indefinite because the specification lacked some standard for measuring the degree intended and, therefore, properly rejected as indefinite under 35 U.S.C. 112, second paragraph. Ex parte Oetiker, 23 USPQ2d 1641 (Bd. Pat. App. & Inter. 1992).

5. Applicant's specification does not provide and definite range for which "about 11.8. \pm .1 mm" and "about 20-70 cm" thus one of ordinary skill would not know whether measurements slightly outside the range are to be encompassed by the invention. That is, there is no defined upper and lower threshold stated in the specification such as "about 20-70 cm but not be less then 10 cm or to exceed 80 cm. The Examiner notes that similar issue would stem from the replacing "about" with "approximately".

Election/Restrictions

6. Applicant's election with traverse of Group II – Claims 1-12 and 20-25 via telephone on 6/27/2008 is acknowledged. The traversal is on the ground(s) that all the previously presented claims have already been searched, thus there is no undo burden in examining all the claims.
7. This is not found persuasive because:

FROM MPEP SECTION 803

"For purposes of the initial requirement, a serious burden on the examiner may be prima facie shown if the examiner shows by appropriate explanation of separate classification, or separate status in the art, or a different field of search as defined in MPEP § 808.02."

FROM MPEP SECTION 808.02

"in order to establish reasons for insisting upon restriction, must show by appropriate explanation one of the following:

- (A) Separate classification thereof: This shows that each distinct subject has attained recognition in the art as a separate subject for inventive effort, and also a separate field of search. Patents need not be cited to show separate classification.
- (B) A separate status in the art when they are classifiable together: Even though they are classified together, each subject can be shown to have formed a separate subject for inventive effort when an explanation indicates a recognition of separate inventive effort by inventors. Separate status in the art may be shown by citing patents which are evidence of such separate status, and also of a separate field of search.
- (C) A different field of search: Where it is necessary to search for one of the distinct subjects in places where no pertinent art to the other subject exists, a different field of search is shown, even though the two are classified together. The indicated different field of search must in fact be pertinent to the type of

subject matter covered by the claims. Patents need not be cited to show different fields of search."

8. As stated in the Advisory Action mailed 6/23/2008 the Examiner believes Group I to have the classification of class 348, subclass 78 and Group II to have the classification of class 348, subclass 348. As the groups are shown to have separate classification in the art serious burden on the examiner has been shown.
9. Claims 26-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/23/2008.
10. The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 6 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
13. The term "about" in claims 6 and 10 is a relative term which renders the claim indefinite. The term "about" is not defined by the claim, **the specification does not provide a standard for ascertaining the requisite degree**, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1-2 and 4-9 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,267,085 to Sasaki et al.

16. As stated in the MPEP § 2111.02 (please see also *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 – CCPA 1951), if the preamble of the claim neither recites the limitations of the claim nor is necessary to give life, meaning, and vitality to the claim; then the preamble of the claim is not served to further define the structure of the claim. Thus, in regards to claims 1-11, the preamble of the claim is not given any patentable weight since the preamble of the claim neither recites the limitations of the claim nor is necessary to give life, meaning, and vitality to the claim.

17. With respect to **claim 1 Sasaki** discloses, in Fig. 4, an iris recognition camera, comprising: a driving barrel (Fig. 4) configured to support a lens (L1 or L2); a moving device configured to reciprocatingly move the driving barrel to perform both focus and zoom operations (column 5 lines 18-25, lines 32-34 and lines 59-61 and column 6 lines 1-3); and a position sensor (22) configured to detect a position of the driving barrel (Fig. 4) within the camera (column 6 lines 29-46; where the magnetic resistance element

detects the position of the driving barrel by detecting the position of the first holding frame 10 on the optical axis).

18. With respect to **claim 2 Sasaki** discloses, in Fig. 4, the iris recognition camera according to claim 1, wherein the moving device comprises: a motor (Mz or Mf); a lead screw (2 or 12) connected to the motor (Mz or Mf) at one end; and a rack (11 or 19) coupled to an outer circumference of the lead screw (2 or 12).

19. With respect to **claim 4 Sasaki** discloses, in Fig. 4, The iris recognition camera according to claim 1, wherein the driving barrel is provided at one side with a detecting portion (21) configured to communicate with the position sensor (22) so that the position sensor (22) detects a position of the driving barrel (column 6 lines 31-46).

20. With respect to **claim 5 Sasaki** discloses, in Fig. 4, the iris recognition camera according to claim 1, wherein the lens comprises a wide-angle lens (column 8 lines 5-11; where the lens system focuses in the telescopic side and wide angle side, thus the lenses are wide angles lenses).

21. With respect to **claim 6 Sasaki** discloses, in Fig. 4, the iris recognition camera according to claim 5, wherein the wide-angle lens has a focusing distance of about 11.8.+-. 1 mm (column 4 line 60 through column 5 line 2; as the term about 11.8+-.1 mm is ambiguous to what is comprised within the range the Examiner has interpreted 40mm to be about 11.8 mm).

22. With respect to **claim 7 Sasaki** discloses, in Fig. 4, the iris recognition camera according to claim 1, further comprising one or more guide bars (2, 6 and 12) configured to guide the driving barrel during reciprocating movement (column 5 line 23 through

column 6 line 30; where the anti rotation bar 6 and lead screws 2 and 12 guide the lenses during reciprocating movement of the driving barrel).

23. With respect to **claim 8 Sasaki** discloses, in Fig. 4, the iris recognition camera according to claim 7, wherein the one or more guide bars (2, 6 and 12) comprises a pair of guide bars (2 and 6), respectively, positioned on opposite sides of the driving barrel (fig. 4).

24. With respect to **claim 9 Sasaki** discloses, in Fig. 4, the iris recognition camera according to claim 1, wherein the position sensor (22) is positioned behind the lens (Fig. 4; where the sensor 22 can be seen as positioned behind both lens L1 and L2 with respect from the top of body tube 1).

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,267,085 to Sasaki et al.

27. With respect to **claim 3 Sasaki** discloses an iris recognition camera, comprising: a driving barrel configured to support a lens; a moving device configured to reciprocatingly move the driving barrel to perform both focus and zoom operations; and a position sensor configured to detect a position of the driving barrel within the camera;

and wherein the moving device comprises: a motor; a lead screw connected to the motor at one end; and a rack coupled to an outer circumference of the lead screw.

28. **Sasaki** does not expressly disclose wherein the motor comprises a step motor.

29. However, **Official Notice** (MPEP § 2144.03) is taken that both the concepts and advantages of using a step motor in a lens barrel to adjust the lenses are well known and expected in the art. At the time the invention was made, it would have been obvious to one with ordinary skill in the art to have a step motor as the motors Mz and Mf of **Sasaki** as one of ordinary skill in the lens barrel art would instantly recognize a simple means to accurately control the lens positions through use of a common controller.

30. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,267,085 to Sasaki et al in view of U.S. Patent 6,850,631 to Oda et al.

31. With respect to **claim 10 Sasaki** does not expressly disclose wherein the lens has an image pickup distance range of about 20-70cm. However, Oda teaches an iris input device in which the focal length of the lens is fixed at a value within approximately 0.5 to 50 cm (Oda, col. 4 lines .28-29).

32. Therefore, taking the teachings of Sasaki and Oda, it would have been obvious to one of ordinary skill in the art to have a lens with a pickup distance range of about 20-70 cm in order to get a proper reading of the iris, anything less than 20 cm may cause an inaccurate reading, or cause the eye to come into contact with the iris recognition camera (Oda, col. 4 lines 28-46).

33. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,267,085 to Sasaki et al in view of U.S. Patent Application Publication 2002/0135693 A1 to Ohkawara et al.

34. With respect to **claim 11 Sasaki** does not expressly disclose wherein the position sensor comprises one of an optical sensor and a contact sensor.

35. However, in analogous art, **Ohkawara** discloses, in Fig. 17-18, an optical sensor which is used to determine the position of a lens within a lens barrel (paragraphs 202-210). At the time the invention was made it would have been obvious to one of ordinary skill in the art to have used a optical sensor as taught by **Ohkawara** as the sensor for detecting the lenses disclosed by **Sasaki**, for doing so would provide a small and power efficient sensor, thus reducing the size and power consumption of the system.

36. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,267,085 to Sasaki et al in view of U.S. Patent 6,930,707 to Bates et al.

37. With respect to **claim 12 Sasaki** does not expressly disclose the lens barrel is used for an iris recognition camera in an iris recognition system.

38. In analogous art, **Bates** discloses, in Fig. 5, using a lens barrel for iris recognition (column 5 lines 32-52). As stated in **Bates** (column 10 lines 17-34) at the time the invention was made it would have been obvious to one of ordinary skill in the art to have used the lens barrel of **Sasaki** for iris recognition as taught by **Bates**, for doing so would provide anti-theft or privacy implementation without adding any cost to the camera.

39. Claims rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent Application Publication 2002/0135693 A1 to Ohkawara et al in view of U.S.

Patent 6,930,707 to Bates et al.

40. With respect to **claim 20 Ohkawara** discloses, in Fig. 17-18, discloses, in Fig. 17-18, a method of operation for a camera, comprising: detecting a user (paragraph 75 and 191; where it is detected is a wide-angle lens is mounted when the signal is sent to the AF microcontroller 115 from detecting switch 123; thus, a wide-angle lens user is detected when the wide angle lens is attached); moving a camera lens (101 and 104) to an initial position detected by a position sensor (115) after the position sensor (115) detects the user (paragraph 75, 191 and 194; where the AF controller 115 controls the lenses to return to their respective predetermined positions after the wide angle user is detected from attaching the wide angle lens); thereafter reciprocatingly moving the camera lens (101 and 104) to perform both focus and zoom operations from the initial position to an image pickup location where a object can be captured (paragraph 203-205); and performing the image pickup using an image pickup device (paragraph 70-71; where it is inherent to capturing video signals to perform image pickup after focusing).

41. **Ohkawara** does not expressly disclose the camera is used as an iris recognition camera and where a user's iris is captured.

42. In analogous art, **Bates** discloses, in Fig. 5, using a lens barrel for iris recognition camera which is used to capture a user's iris (column 5 lines 32-52). As stated in **Bates** (column 10 lines 17-34) at the time the invention was made it would have been obvious to one of ordinary skill in the art to have used the lens barrel of **Ohkawara** for iris

recognition as taught by **Bates**, for doing so would provide anti-theft or privacy implementation without adding any cost to the camera.

43. With respect to **claim 21 Ohkawara** discloses wherein the camera lens comprises a wide-angle lens (paragraph 75).

44. With respect to **claim 22 Ohkawara** discloses wherein the image pickup device comprises a charge-coupled device (paragraph 70-71).

45. With respect to **claim 23 Ohkawara** discloses wherein the iris recognition camera comprises a driving source for moving the lens in the form of a step motor (paragraph 66 and 69).

46. With respect to **claim 24 Ohkawara** discloses wherein the iris recognition camera further comprises a power transmission configured to transmit power for moving the camera lens (paragraph 66 and 69; where the step motors transmit power to move the lenses).

47. Claims 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2002/0135693 A1 to Ohkawara et al in view of U.S. Patent 6,930,707 to Bates et al in further view of U.S. Patent 5,267,085 to Sasaki et al.

48. With respect to **claim 25 Ohkawara in view of Bates** does not expressly disclose wherein the power transmission device includes a lead screw configured to be rotated by power from a driving source, and rack screw coupled to an outer circumference of lead screw.

49. In analogous art, **Sasaki** discloses controlling lens position through a transmission device including a lead screw (2) configured to be rotated by power from a driving source (Mz), and rack screw (12) coupled to an outer circumference of lead screw (2) (Fig. 4 and column 5 line 23 through column 6 line 30; where the lens L2 is controlled via screw 12 which is coupled to the outer circumference of screw 2 via first holding frame 10 as seen in Fig. 4). As stated in **Sasaki** (column 9 line 66 through column 10 line 2) at the time the invention was made it would have been obvious to one of ordinary skill in the art to have used a screw system as taught by **Sasaki** for moving the lenses of **Ohkawara in view of Bates**, for doing so would provide a zoom lens device of a two-lens grouped structure in which the zoom lens device is made compact and a zoom ratio is increased.

Conclusion

50. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. Patent 7,352,387 to Yamamoto
- U.S. Patent 6,072,443 to Nasserbakht et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL M. PASIEWICZ whose telephone number is (571)272-5516. The examiner can normally be reached on M-F 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lin Ye can be reached on (571)272-7372. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DMP
June 30, 2008

/Lin Ye/
Supervisory Patent Examiner, Art Unit 2622